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AUTHOR	Mammolenti, Jennifer; Vollmer, Patricia; Smith, Denise
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ABSTRACT

This study examined whether self-evaluation and self-reflection coupled with self-monitoring of on-task behavior would increase the occurrence of on-task behavior in 12 fourth and fifth grade students with mild disabilities (learning disabilities, emotional disorders, and mild mental handicaps). Two teachers in different schools implemented a self-monitoring intervention during reading, language arts, and mathematics instruction in a resource room setting during small group instruction. The study found that implementation of self-monitoring increased on-task behavior, but self-evaluation and self-reflection did not produce further increases in on-task behavior. Results also suggest that reinforcement for on-task behavior may be necessary along with reinforcement for marking record sheets accurately. A daily routine with a structured lesson format also appeared to have a positive effect on on-task behavior. Research instruments are appended. (Contains 32 references.) (DB)

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Running Head: SELF- MONITORING: EFFECTS OF SELF-RECORDING

Self-Monitoring: The Effects of Self-Recording and Self Evaluation on Off-Task Behavior of Elementary Students with Mild Disabilities

Jennifer Mammolenti, Patricia Vollmer and Denise Smith
Indiana University South Bend

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Abstract

Increased on-task behavior through self-monitoring in a variety of settings, with students with various disabilities has been well-established in the literature. This study investigated whether self-evaluation and self-reflection coupled with self-monitoring of on-task behavior would increase the occurrence of on-task behavior. These investigators questioned whether disruptions in teaching caused by student behavior would decrease if self-evaluation and self-reflection was coupled with self-monitoring. Two teachers in different school corporations studied 12 students with learning disabilities, emotional disorders, and mild mental handicaps in 4th, and 5th grades during reading, language arts, and mathematics in a resource setting during small group instruction. They found that the implementation of self-monitoring increased on-task behavior, but self-evaluation and self-reflection did not produce further increases of on-task behavior.

Introduction

As the number of students with special needs included in regular education classrooms increases, classroom teachers welcome strategies, which do not overburden them, to meet the needs of those students. Students with learning disabilities are often characterized as passive learners, inattentive, and lacking in task-approach skills (Hallahan, Marshall, & Lloyd, 1981), creating a challenge for teachers to actively involve them in the learning process. Other students with special needs often present various difficulties in controlling unwanted behaviors. Students' management of their own behavior might decrease teachers' reluctance to work with students with mild disabilities and provide them with behavioral management programs.

Various cognitive behavioral modifications have been used to decrease unwanted behaviors and increase time on-task for those students. Considerable research has been done on self-monitoring to increase time on task, with and without reinforcement. Although most research has occurred in self-contained special education settings, it has proven to be an effective intervention for increasing time on-task, even with students with low cognition and in regular education settings.

Literature Review

While researchers have been looking at the effectiveness of self-monitoring techniques to increase time on-task, they questioned whether it was more important for the student to use the procedure consistently or make honest evaluations of their behavior. Webber, Shuermann, McCall, and Coleman (1993) concluded that the on-task behavior of students using the procedure would change regardless of whether they made accurate recordings. The simple act of recording their own behavior would cause students to become more aware of their behavior, leading to decreases of unwanted behaviors.

Lloyd and Hilliard (1989) studied the accuracy of students' self-recording of on-task behavior with and without reinforcers. Accuracy was low without the reinforcers.

Accuracy was high, however, when either the recording of the behavior was accurate or recording was accurate regardless of actual on-task behavior, when reinforcers were given. After repeated trials, accuracy fell in the trial where the actual on-task behavior was not necessary for recording. They recommended that the classroom self-reinforcement procedures that are used for long periods of time without contingencies for accuracy be used with caution.

Self-monitoring is a procedure taught to students by direct instruction and modeling to record their own behavior. It consists of two components, self-assessment and self-recording. The self-assessment occurs when the student makes a judgment as to whether a particular behavior has occurred. The self-recording is the physical, behavioral recording of an occurrence of a behavior. It is a procedure where students tally occurrences of a behavior, such as on-task behavior, or count instances of a behavior occurring with a wrist counter. The desired behavior or the accuracy of the counting of the behavior may or may not be reinforced.

Interval counts are most often used for recording self-monitored behavior. Students are taught to record their behavior when given a cue. They are usually given a form to check yes or no, write a plus or minus or in some other manner indicate whether they were engaged in the desired behavior when the cue was given. The most common cues used were a tape-recorded tone or verbal cue given by the teacher. It has been recommended that short intervals averaging 45 seconds be used when the procedure is first introduced with either the interval being lengthened or tone faded later. Intervals as long as 15 to 30 minutes have been used, but longer intervals may adversely affect the student's behavior. The best increases of on-task behavior have been reported with recording techniques and cues that are most obtrusive (Webber et al., 1993).

Researchers have studied self-monitoring of behavior in various settings. It has been studied in general education, resource, and self-contained settings with students of varying disabilities and Intelligence Quotients (IQs). It has also been studied with and

without reinforcement. It has been studied to determine if academic performance increases as on-task behavior increases. Researchers have varied contingencies, conditions, intervals for recording, and the length of studies. The findings have all been similar. They have found, for the most part, that on-task behavior increases with self-monitoring of behavior.

Hallahan et al. (1981) studied three 10 and 11 year-old boys with IQs ranging from 87-106, who received instruction in a self-contained learning disabilities classroom. Since most research has centered on students doing seatwork, they wanted to determine whether time on-task increased during oral group instruction. The students wore wrist counters to tally on-task behavior that occurred when a tone was sounded. They found that on-task behavior doubled the baseline phase during small-group orally presented instruction with some adaptations. They determined that a certain level of self-recording accuracy was necessary to establish the student's ability to determine on-task behavior for the intervention to be successful.

Most studies of self-monitoring procedures have been centered on students with normal IQs in the range of 85-125, but Rooney, Polloway, and Hallahan (1985) studied low IQ students with learning disabilities. The mean IQ of the group they studied was 76. They found that self-monitoring of attention of low IQ students with learning disabilities could be effective. However, adjustments in the design of the self-monitoring system might be necessary to meet the needs of lower functioning students with learning disabilities. Some students required more extensive training. They felt pictorial cues, videotaped practice, and backup reinforcers might increase the self-recording ability of some students. Motivation, behavioral and emotional disorders, and the instructional setting might also require an adjustment in the self-monitoring procedure.

Rooney, Hallahan, and Lloyd (1984) questioned whether self-monitoring procedures would effectively increase on-task behavior in the regular education classroom. They studied the behavior of four target students chosen by the

classroom teacher because of the severity of their attentional problems. Two of those students were classified as learning disabled. The research was conducted while the students were involved in a limited range of academic tasks. Typically the students were involved in language arts seatwork, which consisted of copying from the chalkboard or overhead projector. They found that the mean for on-task behavior doubled for all four students. They did not feel that what the students were working on each day while data was collected was consistent enough for the data to be compared. They felt it was important to insure that the students were correctly using the self-monitoring procedure as it had been taught to them. They also found that reinforcement coupled with self-monitoring led to higher levels of on-task behavior.

The majority of research on self-monitoring techniques has centered on elementary students with special needs. Prater, Joy, Chillman, Temple, and Miller (1991) proposed a study to determine whether the results of past research with elementary students would generalize to junior-high and high-school students. They found that self-monitoring procedures could successfully be used with junior-high and high-school students with learning disabilities in special and regular education settings, while improving their on-task behavior. They felt self-monitoring procedures would be particularly appropriate at the secondary level because students have increasing demands placed on them and student-teacher ratios are higher. Although it may be necessary in some situations to use self-monitoring with reinforcement, they found that self-monitoring and reinforcement can be effectively faded without a large decrease in on-task behavior. They concluded that self-monitoring of on-task behavior might be more effective when students are expected to complete independent work as opposed to teacher-directed instruction or group interaction.

In 1992 Prater, Hogan, and Miller studied one 14-year-old with a history of learning problems, acting out, and impulsive behavior to determine if the self-monitoring behavior taught in the resource setting would generalize to the regular education

classroom and increase performance. Not only did they find that the self-monitoring procedure generalized to the regular classroom, his performance on daily assignments increased, as well as his performance on standardized testing that was administered after the procedure was implemented. The improvement of standardized test scores was attributed to the student's increased confidence in his ability to perform academic tasks, which he gained over the course of the study. A poster of four visual representations of on-task behavior was placed on the wall of his classrooms as a cue to maintain his on-task behavior at high levels after fading. Regular education teachers found the poster had a positive impact on other students in their classes also.

Past research has investigated self-monitoring of on-task behavior. Researchers have studied students with IQs ranging from low to above average, with a variety of disabilities in settings ranging from the regular education classroom to self-contained classrooms. All of the studies have had similar findings, using similar methods. Previous studies have had students tally their on-task behavior on record sheets or use wrist counters at generally short intervals of a minute or less. They have had students self-monitor academic performance along with on-task behavior. The researchers have monitored academic performance. They have had student's self-monitor only their on-task behavior. They have implemented self-monitoring with and without reinforcement. The results have not consistently shown academic performance to increase proportionately with on-task behavior. They have found that on-task behavior consistently increases with the use of self-monitoring. Regular education teachers have been pleased to have the procedure implemented in their classrooms, with benefits sometimes extending to whole classes.

The present study was conducted to determine whether self-evaluation and self-reflection coupled with self-recording of on-task behavior would increase the occurrence of on-task behavior that was been found in previous studies on self-monitoring. The question these researchers asked was whether disruptions in

teaching caused by student behavior would decrease if self-evaluation and self-reflection coupled with self-monitoring of behavior was used to increase on-task behavior? The researchers used intervals to monitor behavior that are longer than those used in previous studies. The researchers expected to find results similar to those in previous studies.

Method

Participants and Setting

The participants were 12 students with learning disabilities, mild mental handicaps, emotional disorders or a combination of those disabilities. They were 4th and 5th grade students with ages ranging from 10 to 12 years-old, who received special education services in a resource setting in language arts or mathematics five times a week for 45 minutes daily. The students had been placed in groups for instruction at the beginning of the 2000-2001 school year. The students attended schools in two different urban school districts. One district was small, while the other was considerably larger.

The students participating from the smaller district were one 4th grade boy with a mild mental handicap, one 4th grade girl with a primary emotional disorder and a secondary learning disability, two 5th grade girls with learning disabilities, and one 5th grade girl with a mild mental handicap. Their Full Scale IQ's according to the WISC-III ranged from 75-105. The students participating from the larger district were three 5th grade boys with learning disabilities, one 5th grade girl with a learning disability, two 5th grade girls with an emotional disorder, and a 5th grade boy with a primary emotional disorder and a secondary mild mental handicap. Their Full Scale IQ's according to the WISC-III ranged from 69-94. State guidelines were used to determine disabilities.

Materials

The materials used in this study consisted of a taped tone and recording sheets. The investigators made tapes of a ringing doorbell with intervals of four, five, seven, and ten minutes. The tape with intervals of four minutes was used for the first three

weeks of the study and the five, seven and ten minute intervals were each used for a week. A tape player was used to play the tapes. The investigators made recording sheets to record the on and off-task behavior of the students for each of the intervals. They made a recording sheet with two questions on it for the students to reflect on their behavior for the week. Sample recording sheets can be seen in Appendix A.

Procedure

Data was collected for 40 minutes at the smaller school while the students received services in reading and language arts for 45 minutes daily in a resource setting. At the larger school, students received services in mathematics for 45 minutes daily in a resource setting. Students were trained in self-monitoring of on-task behavior, self-evaluation of that day's behavior and how to respond to two open-ended questions given at the end of each week. The two teachers conducting this study modeled on-task and off-task behaviors for the students, as well as, how to respond to the cue to record their behavior.

The dependent variable in this study was off-task behavior. Off-task behavior was described as lack of eye-contact when the teacher was instructing or another student was answering or asking a question, making noises with mouth, hands or feet, or other objects, talking out, talking to peers, playing with objects or school supplies, out-of-seat without permission, or arguing with teacher or peers.

Each day the students were given a card with a column for on-task behavior, off-task behavior and column with a scale to rate their behavior for that day. A taped tone was the cue for the students to record their behavior on their cards. At the end of each 40 minute recording period the students were instructed to rate their behavior for that day on the following scale: 1 = great improvement needed, 2 = some improvement needed, 3 = little improvement needed, 4 = no improvement needed. The teacher also recorded her mark for the student's behavior for that day on his or her card. At the end of each week the students were asked to reflect on their behavior for

that week. They were asked to answer two questions: (1) What behaviors did I have a problem controlling this week? and (2) What can I do to improve my behavior? To ensure accuracy of recording data, students were given two points daily for accurately recording their behavior. The points were used to purchase prizes.

Each student was assigned a three-digit number. The three digit number was used on all record sheets for each student. Baseline data was recorded at 4 minute intervals for each student for five consecutive days by the two teachers while they were teaching the students. For the first three weeks the students recorded their behavior as on-task or off-task when the tone sounded at 4 minute intervals. The fourth week the tone sounded at 5 minute intervals, the fifth week it sounded at 7 minute intervals, and the sixth week it sounded at 10 minute intervals. Due to the time limitations of this study a return to baseline with the intervention implemented a second time was not conducted as had been done in previous studies.

Results

The mean was calculated for the on-task behavior of all of the 12 students for each of the six weeks of the study. The mean was also calculated for the on-task behavior for each of the four groups for each of the six weeks. Table 1 shows a comparison of the means of the 12 students and the group means.

Table 1

Weekly Means of All Students and Groups of Students

Group	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
All	90.35	90.76	97.71	95.00	93.45	96.52
4	100.00	98.75	98.75	100.00	97.17	100.00
3	100.00	99.17	100.00	97.30	96.22	98.33
2	83.75	86.88	96.88	91.73	86.31	92.08
1	83.06	82.22	95.83	93.83	97.73	98.33

The mode, median and range were calculated for all of the 12 students for each of the six weeks. Those results can be seen in Table 2

Table 2

Mode, Median and Range of Weekly Means of All Students

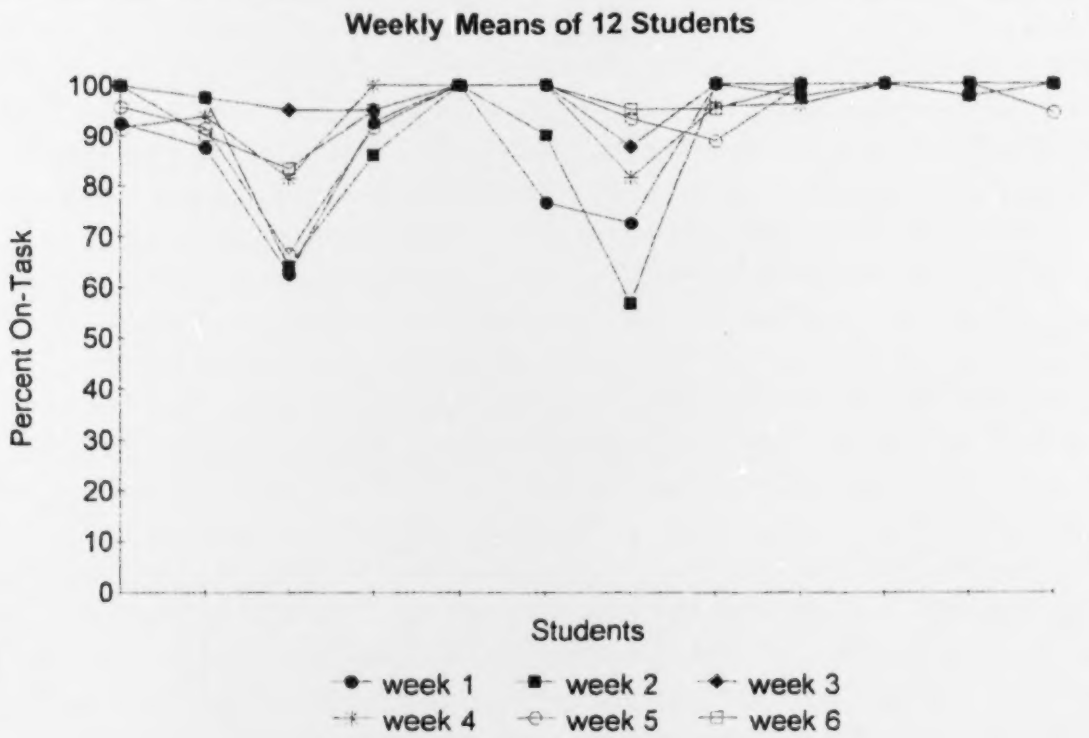
	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Mode	100.00	100.00	100.00	100.00	100.00	100.00
Median	96.25	97.5	100.00	98.00	95.00	100.00
Range	100.00 - 62.50	100.00 - 56.67	100.00 - 87.50	100.00 - 81.50	100.00 - 66.50	100.00 - 83.33

Findings

The weekly means of all 12 students on-task behaviors for each of the six weeks of this study show improvement for weeks one to three with decreases for weeks four and five and an increase for week six. These results can be seen in Figure 1. The pattern was similar for each of the four groups except for week two when on-task behavior decreased for three of the four groups. Three of the four groups increased on-task behavior for week three, while three of the four groups decreased on-task behavior for weeks four and five and all four groups increased on-task behavior for week six. The mode of the weekly averages of on- task behaviors of all students was consistently 100 while the median followed the same pattern as the means of the weekly averages for the 12 students. The lowest score of the ranges of the weekly averages of all 12 students followed the same pattern as the means except for week two when the low score of the range decreased instead of increasing.

This investigation showed that on-task behaviors were consistently high during the course of the study, but on-task behavior did not consistently rise in an upward

Figure 1.



direction for all students or groups of students as was seen in previous studies. Baseline data was not included in the tables because the investigators did not feel that they were able to collect accurate data and teach at the same time. It would be necessary to have an observer collect the baseline data to use for comparison with data collected during the study. The students' on-task behavior did increase considerably for both investigators once the intervention was implemented as compared to on-task behavior prior to the study. Data collected on how the students rated their behavior each day of the study and how the teacher rated their behavior was not analyzed due to no standards being set for what constituted behavior that needed to improve or not improve. Students did not spend time reflecting on their behavior to answer the two questions about their behavior at the end of each week before writing, thus that data was not considered valid and was not analyzed either. The investigators did not feel

that self-evaluation and self-reflection coupled with self-recording of on-task behavior would further increase the occurrence of on-task behavior that had been found in previous studies on self-monitoring.

Discussion

Interpretations

The investigators saw an immediate increase in on-task behaviors of all students the first week of the study as compared to behaviors prior to the study. They attributed this to the students' awareness of their behavior and the students' interest in obtaining daily incentive points for accurately recording their on and off-task behavior. The investigators noticed the students were in competition with each other, wanting to be on-task at the beginning of the study. That effect did not last for the duration of the study.

Students usually entered the resource rooms with considerable commotion. Mammolenti found that the first sound to the tone quieted her students if they were not already on-task. Vollmer did not find the same effect. Her students became quite bored with the study by the third week and she had to remind them to mark their record sheets when the tone sounded. Most of her students did not participate willingly in the study during the fifth and sixth weeks, which may have had an effect on the lower rates of on-task behavior for her group one and two as compared to Mammolenti's groups three and four.

Neither investigator felt that the students, who had been most off-task prior to the study, did not accurately rate their behavior each day of the study. This may have been partly due the students not understanding the rating scale as it related to their behavior for the day. The students felt that if they were on-task 100 percent when the tone sounded that they did not have to improve their behavior. However, the investigators found that most off-task behavior occurred between the soundings of the tone. Student ratings and teacher ratings quite often did not match. The investigators considered the

students' behavior for the duration of the class period, while the students considered the on-task behavior they had marked for the day. The investigators generally rated the students' behavior lower than the students' rated their own behavior. The behavior rating also occurred at the end of the class period when students were anxious to return to their classrooms. The student and teacher ratings were not analyzed due to the inconsistencies discussed here along with the investigators observing no particular effect on on-task behavior.

The investigators did not observe an effect of on-task behavior due to the students' reflection on their behavior and the answering of the two questions about their behavior at the end of each week either. An analysis of that data was not done, because the investigators did not consider that data to be valid. None of the students in the study enjoyed writing or wrote with ease. The students often wrote short answers of several words without reflecting on their behavior for the week and how they might improve their behavior. They often only considered the behavior for that day and related their responses to it. The students also considered themselves to have better behavior in their comments than they actually had, often commenting that they had no behaviors to improve.

The various disabilities of the students did not appear to affect the results of this study. At the beginning of the study the investigators felt that there might be a considerable effect, but no distinct patterns were found relating to disabilities. Students with behavior disorders were as likely as students with mild mental handicaps or learning disabilities to maintain a high rate of on-task behavior. However, one student with a behavior disorder and one student with a learning disability had the most inconsistent patterns of on-task behavior during the study.

The investigators did feel that the curriculum and how it was taught did affect the rate of the students' on-task behaviors. Mammolenti instructed her students with the SRA reading program and the Orton-Gillingham phonetically-based reading program

along with daily journal writing. Her students knew what was expected of them each day as the class period was structured the same each day. Her groups three and four obtained and generally maintained higher rates of on-task behavior than Vollmer's groups one and two. Vollmer instructed her students in various mathematical concepts with no pattern in routine from day-to-day. Vollmer found that her students were more likely to be on-task when her students enjoyed an activity than when they did not like the activity or assignment. Both investigators felt that the procedure used in the study produces higher rates of on-task behavior when the students follow the same routine each day.

Implications

The results of this study implied that self-monitoring coupled with proper incentives can increase on-task behaviors. Students in this study exhibited less on-task behavior with non-tangible reinforcers. Students were observed by the investigators to be bored and disinterested when they received no tangible incentive for on-task behavior. When the study began the students exhibited excitement and eagerness to please their peers and teachers by showing on-task behaviors. Students received tangible incentive points. As the study progressed the students began to display more off-task behavior due to lack of interest in reinforcers they could obtain with their incentive points. This is similar to the findings of past research. Lloyd et al. (1989) found positive incentives increased on-task behaviors. When positive reinforcers were not used off-task behaviors occurred. Jo Webber et al. (1993) found in twenty-seven studies that self-monitoring increased on-task behavior. When students were motivated for change they were more likely to achieve positive behavior. The investigators of this study concluded that the reinforcers needed to be such that the students would be motivated to obtain them.

Mammolenti's study format had a positive effect resulting in an increase of on-task behavior. Mammolenti's findings were similar to Hallahan et al. (1981)

where structured math lessons were routinely implemented in a resource setting. Vollmer's findings of on-task behaviors with her students did not replicate past research. It appears that Vollmer's lack of routine in teaching math concepts to her groups caused more off-task behaviors to occur.

Suggestions for Future Research

Based on their classroom experience and the present study the investigators felt some changes could be implemented in future research of on-task behavior in a resource setting. Using more positive reinforcers as motivators to be on-task would create the display of more positive on-task behaviors from the students. An outside observer should be used to collect baseline data at the beginning of the research instead of the investigators collecting baseline data and teaching at the same time. This would allow the investigators to get the true account of the behaviors exhibited as they taught their lessons. The investigators observed their students having difficulties in spelling and writing in the self-reflection questions. Providing oral feedback into a tape player would allow students to discuss the questions in a accurate manner.

Another possible change to this study would be a focus on multiple disabilities, which would to create a wider spectrum of data justifying how self-evaluation can increase on-task behaviors across all disabilities, not just those used in this study.

The suggested changes for future research could play a great part in obtaining greater knowledge of how self-monitoring increases on-task behaviors. Future research should consider how on-task behaviors could be guided to generalize to the regular education classroom to help classroom teachers meet the need of students with special needs.

Summary

As seen in past studies and in this study self-monitoring does increase on-task behaviors of students with special needs in regular education classrooms, intensive classrooms and in resource rooms. When students self-record their on-task behavior an

immediate increase is seen. Although the behavior may not maintain at that level with all students the variability in the on-task behavior is not of a degree to be of concern. This study showed that reinforcement for on-task behavior may be necessary along with reinforcement for marking record sheets accurately. Self-evaluation and self-reflection did not have an additional impact on on-task behavior. A daily routine with a structured lesson format did appear to have an effect. Future research should look at ways to generalize on-task behavior found in the resource room to the regular education classroom.

References

Hallahan, D. P., Marshall, K. J., & Lloyd, J. W. (1981). Self-recording during group instruction: Effects on attention to task. *Learning Disability Quarterly, 4,* 407-413.

Lloyd, M. E. & Hilliard, A. M. (1989). Accuracy of self-recording as a function of repeated experience with different self-control contingencies. *Child and Family Behavior Therapy, 11 (2),* 1-14.

Prater, M. A., Joy, R., Chilman, B., Temple, J., & Miller, S. R. (1991). Self-monitoring of on-task behavior by adolescents with learning disabilities. *Learning Disability Quarterly, 14,* 164-177.

Prater, M. A., Hogan, S., & Miller, S. R. (1992). Using self-monitoring to improve on-task behavior and academic skills of an adolescent with mild handicaps across special and regular education settings. *Education and Treatment of Children, 15 (1),* 43-55.

Rooney, K. J., Hallahan, D. P., & Lloyd, J. W. (1984). Self-recording of attention by learning-disabled students in the regular classroom. *Journal of Learning Disabilities, 17,* 360-364.

Rooney, K. J., Polloway, E., & Hallahan, D. P. (1985). The use of self-monitoring procedures with low IQ learning disabled students. *Journal of Learning Disabilities, 18,* 384-389.

Webber, J., Scheuermann, B., McCall, C., & Coleman, M. (1993). Research on self-monitoring as a behavioral management technique in special education classrooms: A descriptive review. *Remedial and Special Education, 14 (2),* 38-56.

Bibliography

DiGangi, S. A., Maag, J. W., & Rutherford, R. B. (1991). Self-graphing of on-task behavior: Enhancing the reactive effects of self-monitoring on on-task behavior and academic performance. *Learning Disability Quarterly,14 (3),* 221-230.

Dunlap, L. K., Dunlap, G., Koegel, L. K., & Koegel, R. L. (1991). Using self-monitoring to increase independence. *Teaching Exceptional Children, 23 (3),* 17-22.

Hallahan, D. P., Lloyd, J. W., Kosiewicz, M. M., Kauffman, J. M., & Graves, A. W. (1979). Self-monitoring of attention as a treatment for a learning disabled boy's off-task behavior. *Learning Disability Quarterly, 2,* 24-32.

Hallahan, D. P., Marshall, K. J., & Lloyd, J. W. (1981). Self-recording during group instruction: Effects on attention to task. *Learning Disability Quarterly, 4,* 407-413.

Hallahan, D. P., & Sapona, R. (1983). Self-monitoring of attention with learning disabled children: Past research and current issues. *Journal of Learning Disabilities, 15,* 616-620.

Lentz, F. E. (1988). On-task behavior, academic performance, and classroom disruptions: Untangling the target selection problem in classroom interventions. *School Psychology Review, 17,* 243-257.

Lloyd, J. W., Bateman, D. F., Landrum, T. J., & Hallahan, D. P. (1989). Self-recording of attention versus productivity. *Journal of Applied Behavior Analysis, 22,* 315-323.

Lloyd, M. E. & Hilliard, A. M. (1989). Accuracy of self-recording as a function of repeated experience with different self-control contingencies. *Child and Family Behavior Therapy, 11 (2),* 1-14.

Maag, J. W., Rutherford, R. B., & DiGangi, S. A. (1992). Effects of self-monitoring and contingent reinforcement on on-task behavior and academic

productivity of learning-disabled students: A social validation study. *Psychology in the Schools, 29 (2),* 157-172.

Maag, J. W., Reid, R., & DiGangi, S. A. (1993). Differential effects of self-monitoring attention, accuracy, and productivity. *Journal of Applied Behavior Analysis, 26 (3),* 329-3-44.

Malone, L. D., & Mastropieri, M. (1992). Reading comprehension instruction: Summarization and self-monitoring training for students with learning disabilities. *Exceptional Children, 58,* 270-279.

McConnell, M. E. (1999). Self-monitoring, cueing, recording and managing: Teaching students to manage their own behavior. *Teaching Exceptional Children,32 (2),* 14-21.

McLaughlin, T. F. (1984). A comparison of self-recording and self-recording plus consequences for on-task and assignment completion. *Contemporary Educational Psychology,9 (2),* 185-192.

O'Leary, S. G., & Dubey, D. R. (1979). Applications of self-control procedures by children: A review. *Journal of Applied Behavior Analysis, 12,* 449-465.

Osborne, S. S., Kosiewicz, M. M., Crumley, E. B. & Lee, C. (1987). Distractible students use self-monitoring. *Teaching Exceptional Children, 19 (4),* 66-69.

Prater, M. A., Joy, R., Chilman, B., Temple, J., & Miller, S. R. (1991). Self-monitoring of on-task behavior by adolescents with learning disabilities. *Learning Disability Quarterly,14,* 164-177.

Prater, M. A., Hogan, S., & Miller, S. R. (1992). Using self-monitoring to improve on-task behavior and academic skills of an adolescent with mild handicaps across special and regular education settings. *Education and Treatment of Children, 15 (1),* 43-55.

Reid, R., & Harris, K. R. (1993). Self-monitoring of attention versus self-monitoring of performance: Effects on attention and academic performance.

Exceptional Children, 60, 29-40.

Reid, R. (1996). Research of self-monitoring with students with learning disabilities: The present, the prospects, the pitfalls. *Journal of Learning Disabilities, 29 (3),* 317-331.

Rooney, K. J., Hallahan, D. P., & Lloyd, J. W. (1984). Self-recording of attention by learning-disabled students in the regular classroom. *Journal of Learning Disabilities, 17,* 360-364.

Rooney, K. J., Polloway, E., & Hallahan, D. P. (1985). The use of self-monitoring procedures with low IQ learning disabled students. *Journal of Learning Disabilities, 18,* 384-389.

Snider, V. (1987). Use of self-monitoring of attention with LD students: Research and application. *Learning Disability Quarterly, 10,* 139-151.

Toothman, T. (1998). A partnership for success. *Reaching Today's Youth: The Community Circle of Caring Journal, 2* (2), 44-47.

Webber, J., Scheuermann, B., McCall, C., & Coleman, M. (1993). Research on self-monitoring as a behavioral management technique in special education classrooms: A descriptive review. *Remedial and Special Education, 14 (2),* 38-56.

Young, K. R., West, R. P., Li, L. & Peterson, L. (1997). Teaching self-management skills to students with learning and behavior problems. *Reclaiming Children and Youth: Journal of Emotional and Behavioral Problems, 6* (2), 90-96.

Appendix

No _____ 10 MINUTE INTERVAL

	ON-TASK	OFF-TASK
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

HOW WAS MY BEHAVIOR TODAY? TEACHER RATING

- ☐ GREAT IMPROVEMENT NEEDED ☐
- ☐ SOME IMPROVEMENT NEEDED ☐
- ☐ LITTLE IMPROVEMENT NEEDED ☐
- ☐ NO IMPROVEMENT NEEDED ☐

No _____ 5 MINUTE INTERVAL

	ON-TASK	OFF-TASK
1		
2		
3		
4		
5		
6		
7		
8		

HOW WAS MY BEHAVIOR TODAY? TEACHER RATING

- ☐ GREAT IMPROVEMENT NEEDED ☐
- ☐ SOME IMPROVEMENT NEEDED ☐
- ☐ LITTLE IMPROVEMENT NEEDED ☐
- ☐ NO IMPROVEMENT NEEDED ☐

No _____ 7 MINUTE INTERVAL

	ON-TASK	OFF-TASK
1		
2		
3		
4		
5		
6		

HOW WAS MY BEHAVIOR TODAY? TEACHER RATING

- ☐ GREAT IMPROVEMENT NEEDED ☐
- ☐ SOME IMPROVEMENT NEEDED ☐
- ☐ LITTLE IMPROVEMENT NEEDED ☐
- ☐ NO IMPROVEMENT NEEDED ☐

No._____ 10 MINUTE INTERVAL

	ON-TASK	OFF-TASK
1		
2		
3		
4		

HOW WAS MY BEHAVIOR TODAY? TEACHER RATING

- ☐ GREAT IMPROVEMENT NEEDED ☐
- ☐ SOME IMPROVEMENT NEEDED ☐
- ☐ LITTLE IMPROVEMENT NEEDED ☐
- ☐ NO IMPROVEMENT NEEDED ☐

No._____ _____ minute interval

What behaviors did I have a problem controlling this week?

What can I do to improve my behavior?

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